1. Product and Company Identification

Product Name: 1422Wci

Company Name: Hitachi Industrial Equipment & Solutions America, LLC
75 NW Point Blvd Suite D,
Elk Grove Village, IL 60007

Phone Number: (800)627-5464

Web site address: https://mc.hitachi-iesa.com

Emergency Contact: Chemtrec (800)424-9300

Intended Use: Printing ink for industrial inkjet printers.

2. Hazards Identification

Flammable Liquids, Category 2
Serious Eye Damage/Eye Irritation, Category 2
Specific Target Organ Toxicity (single exposure), Category 3
Toxic To Reproduction, Category 2
Acute Toxicity: Oral, Category 4
Skin Corrosion/Irritation, Category 2
Serious Eye Damage/Eye Irritation, Category 2A
Specific Target Organ Toxicity (single exposure), Category 1
Specific Target Organ Toxicity (repeated exposure), Category 1
Specific Target Organ Toxicity (single exposure), Category 2

GHS Signal Word: **Danger**

GHS Hazard Phrases:
H225 - Highly flammable liquid and vapor.
H302 - Harmful if swallowed.
H315 - Causes skin irritation.
H319 - Causes serious eye irritation.
H336 - May cause drowsiness or dizziness.
H361 - Suspected of damaging fertility or the unborn child .
H370 - Causes damage to organs
H372 - Causes damage to organs through prolonged or repeated exposure.

GHS Precautionary Phrases:
P201 - Obtain special instructions before use.
P202 - Do not handle until all safety precautions have been read and understood.
P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P233 - Keep container tightly closed.
P240 - Ground/bond container and receiving equipment.
P241 - Use explosion-proof electrical/ventilating/lighting/printing equipment.
P242 - Use only non-sparking tools.
P243 - Take precautionary measures against static discharge.
P260 - Do not breathe dust/fume/gas/mist/vapors/spray.
P264 - Wash hands thoroughly after handling.
P270 - Do not eat, drink or smoke when using this product.
P271 - Use only outdoors or in a well-ventilated area.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P281 - Use personal protective equipment as required.

GHS Response Phrases:	P301+312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. P302+352 - IF ON SKIN: Wash with plenty of soap and water. P303+361+353 - IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower. P304+340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P305+351+338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P307+311 - IF exposed: Call a POISON CENTER or doctor/physician. P308+313 - IF exposed or concerned: Get medical attention/advice. P309+311 - Call a POISON CENTER or doctor/physician if exposed or you feel unwell. P314 - Get medical attention/advice if you feel unwell. P321 - Specific treatment see supplementary first aid measures. P330 - Rinse mouth. P332+313 - If skin irritation occurs, get medical advice/attention. P337+313 - If eye irritation persists, get medical advice/attention. P362 - Take off contaminated clothing and wash before re-use. P370+378 - In case of fire, use dry chemical, carbon dioxide, water spray, or foam to extinguish.
GHS Storage and Disposal Phrases:	P401 - Store tightly closed in a cool and well ventilated place. P405 - Store locked up. P501 - Dispose of contents/container in accordance with local regulations.
Other Hazards:	Causes mild skin irritation.
Potential Health Effects (Acute and Chronic):	Hazards not otherwise classified (HNOC) or not covered by GHS. May form explosive peroxides. Chronic: Not available.
Inhalation:	Harmful if inhaled. Inhalation of vapors may cause drowsiness and dizziness. May cause central nervous system effects such as nausea and headache. Causes respiratory irritation.
Skin Contact:	Repeated exposure may cause skin dryness or cracking. May be absorbed through the skin in harmful amounts.
Eye Contact:	Vapors may cause eye irritation. Causes eye irritation. Animal evidence suggests that MEK is a moderate to severe eye irritant.
Ingestion:	Harmful if swallowed. Aspiration hazard. May cause irritation of the digestive tract. May cause central nervous system depression. Animal evidence suggests that MEK can be aspirated (inhaled) into the lungs during ingestion or vomiting.

3. Composition/Information on Ingredients

CAS #	Hazardous Components (Chemical Name)	Concentration
78-93-3	Methyl ethyl ketone	60.0 -70.0 %
3109-63-5	Tetrabutylammonium hexafluorophosphate	< 5.0 %
25359-84-6	Phenol-. alpha.-pinene resin	< 5.0 %

4. First Aid Measures

Emergency and First Aid Procedures: Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

In Case of Inhalation: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Consult a physician. Remove from exposure and move to fresh air immediately. If experiencing respiratory symptoms call a POISON CENTER or doctor/physician. If breathing is difficult, give oxygen. If not breathing give artificial respiration.

In Case of Skin Contact: Wash off with soap and plenty of water. Consult a physician. Remove contaminated clothing and shoes. Get medical aid if irritation develops or persists. Wash clothing before reuse.

In Case of Eye Contact: Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid. Flush eyes with water as a precaution. If eye irritation persists, get medical advice/attention.

In Case of Ingestion: Never give anything by mouth to an unconscious person. Consult a physician.

Signs and Symptoms Of Exposure: The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

Indication of any immediate medical attention and special treatment needed: No data available.

Note to Physician: Treat symptomatically and supportively.

5. Fire Fighting Measures

Flash Point: -9.00 C (15.8 F) Method Used: TAG Closed Cup

Explosive Limits: LEL: 1.5 UEL: 11.5

Autoignition Pt: 404.00 C (759.2 F)

Suitable Extinguishing Media: Use water spray, dry chemical, carbon dioxide, or alcohol-resistant foam. Use foam, dry chemical, or carbon dioxide. Dry powder. Dry sand.

Unsuitable Extinguishing Media: Do not use water jet.

Fire Fighting Instructions: Wear self contained breathing apparatus for fire fighting if necessary.
Further information. As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Use water spray to cool unopened containers.

Flammable Properties and Hazards: Carbon oxides,
Flash back possible over considerable distance. Container explosion may occur under fire conditions. Vapors may form explosive mixture with air. No data available.

Hazardous Combustion Products: No data available.

6. Accidental Release Measures

Protective Precautions, Protective Equipment and Emergency Procedures: Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas. For personal protection see section 8.

Environmental Precautions: Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

Steps To Be Taken In Case Material Is Released Or Spilled: Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13). Use proper personal protective equipment as indicated in Section 8. Spills/Leaks: Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

7. Handling and Storage

Precautions To Be Taken in Handling: Avoid contact with skin and eyes. Avoid inhalation of vapor or mist. Use explosion-proof equipment. Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge. For precautions see section 2. Do not breathe dust, mist, or vapor. Do not get in eyes, on skin, or on clothing. Use only in a chemical fume hood.

Precautions To Be Taken in Storing: Keep container tightly closed in a cool, dry, and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Hygroscopic. Storage class 510) Store in a cool, dry place. Store in a tightly closed container. Storage class (TRGS 510): 3: Flammable liquids

Other Precautions: Apart from the uses mentioned in section 1 no other specific uses are stipulated. Apart from the uses mentioned in section 1 no other specific uses are stipulated.

8. Exposure Controls/Personal Protection

CAS #	Partial Chemical Name	OSHA TWA	ACGIH TWA	Other Limits
78-93-3	Methyl ethyl ketone	PEL: 200 ppm	No data.	No data.
3109-63-5	Tetrabutylammonium hexafluorophosphate	No data.	No data.	No data.
25359-84-6	Phenol-. alpha.-pinene resin	No data.	No data.	No data.

Personal Protective Equipment Symbols:

Respiratory Equipment (Specify Type): Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi- purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls.

If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced. Respiratory:

Eye Protection: Face shield and safety glasses. Not available. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Protective Gloves: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal

technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. Splash contact:
Material: butyl-rubber Minimum layer thickness: 0.3 mm Break through time: 292 min.
If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario. Wear appropriate protective gloves to prevent skin exposure. Full contact.
Material: Fluorinated rubber Minimum layer thickness: 0.7 mm.
Material: Nitrile rubber Minimum layer thickness: 0.4 mm.

Other Protective Clothing: Impervious clothing. Flame retardant antistatic protective clothing. Wear appropriate protective clothing to prevent skin exposure. Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Engineering Controls (Ventilation etc.): Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

Environmental Exposure Controls: Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

9. Physical and Chemical Properties

Physical States: [ ] Gas [X] Liquid [ ] Solid

Appearance and Odor: White.
solvent odor.

pH: No data.

Melting Point: ~ -86.00 C (-122.8 F)

Boiling Point: ~ 79.60 C (175.3 F)

Flash Point: -9.00 C (15.8 F) TAG Closed Cup

Evaporation Rate: No data.

Flammability (solid, gas): No data available.

Explosive Limits: LEL: 1.5 UEL: 11.5

Vapor Pressure: No data.

Vapor Density (vs. Air=1): No data.

Specific Gravity (Water=1): ~ 0.8

Solubility in Water: No data.

Saturated Vapor Concentration: No data.

Octanol/Water Partition Coefficient: No data.

Autoignition Pt: 404.00 C (759.2 F) - Estimated

Decomposition Temperature: No data.

Viscosity: No data.

Explosive Properties: No data available.

Information on other hazards: No data available.

10. Stability and Reactivity

Reactivity: No data available.

Stability: Unstable [ ] Stable [X]

Conditions To Avoid - Instability: Exposure to moisture. Heat, Incompatible materials, Exposure to moist air or water, May polymerize on exposure to light. flames and sparks. Reacts with air to form peroxides. Conditions to Avoid: Heat.

Incompatibility - Materials To Avoid: Oxidizing agents, Strong reducing agents, Copper, Acid anhydrides, Aluminum, Halogenated compounds, Acids.

Hazardous Decomposition or Byproducts: No data available. In the event of fire: see section 5. Hydrogen cyanide, Carbon monoxide, oxides of nitrogen, oxides of phosphorus, Carbon dioxide, hydrogen fluoride gas. Phosphoric acid, Ammonia, Hazardous decomposition products formed under fire conditions. -Carbon oxides.

Possibility of Hazardous Reactions: Will occur [ ] Will not occur [X]

Conditions To Avoid - Hazardous Reactions: Vapors may form explosive mixture with air.

11. Toxicological Information

Toxicological Information: Acute toxicity.

Germ cell mutagenicity: No data available.
Reproductive toxicity. Aspiration hazard: Epidemiology: Teratogenicity: No data available.
Reproductive Effects: Mutagenicity: Neurotoxicity: Other Studies: Laboratory experiments have shown mutagenic effects.
Suspected of damaging the unborn child. Suspected human reproductive toxicant.
Behavioral: Somnolence (general depressed activity).

Ames test.
Bacteria - Salmonella typhimurium, Result: negative.
In vitro mammalian cell gene mutation test: (OECD Test Guideline 474 Mouse. male and female. Bone marrow.

Irritation or Corrosion: Skin corrosion/irritation.
Result: Tumorigenic:Tumors at site or application. (OECD Test Guideline 404) Serious eye damage/eye irritation Eyes -Rabbit
Irritating to eyes . Skin irritation . (OECD Test Guideline 404) Serious eye damage/eye irritation: Eyes: Rabbit.
Skin. Result: Remarks: (anhydrous substance) (OECD Test Guideline 404 Eyes. No eye irritation . (OECD Test Guideline 405

Sensitization: No data available. Maximisation Test. Species: Guinea pig. Does not cause skin sensitisation. Buehler Test: Result: negative. (OECD Test Guideline 406)

Chronic Toxicological Effects: Specific target organ toxicity - single exposure: May cause drowsiness or dizziness. Specific target organ toxicity -single exposure (Globally Harmonized System) No data available.

Specific target organ toxicity - repeated exposure: Inhalation: Oral. Acute inhalation toxicity: Central nervous system.

Carcinogenicity/Other Information:

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA. CAS# 3109-63-5: Not listed by ACGIH, IARC, NTP, or CA Prop 65. This product is or contains a component that has been reported to be possibly carcinogenic based on its IARC, ACGIH, NTP, or EPA classification.
IARC: 2B - Group 2B: Possibly carcinogenic to humans (Styrene).
NTP: Reasonably anticipated to be a human carcinogen (Styrene).
This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP, or EPA classification.

CAS #	Hazardous Components (Chemical Name)	NTP	IARC	ACGIH	OSHA
78-93-3	Methyl ethyl ketone	n.a.	n.a.	n.a.	n.a.
3109-63-5	Tetrabutylammonium hexafluorophosphate	n.a.	n.a.	n.a.	n.a.
25359-84-6	Phenol-. alpha.-pinene resin	n.a.	n.a.	n.a.	n.a.

12. Ecological Information

General Ecological Information:

Environmental: No information available.
Physical: No information available.
Other: Avoid entering into waters or underground water. (US-EPA)

Results of PBT and vPvB assessment:

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

Persistence and Degradability:

No data available. Result: > 60 % (OECD Test Guideline 301E

Bioaccumulative Potential:

No data available. No bioaccumulation is to be expected (log Pow <= 4).

Mobility in Soil:

No data available.

Other adverse effects:

No data available. An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Toxic to aquatic life.

13. Disposal Considerations

Waste Disposal Method:

Product:
Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.
Contaminated packaging: Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.
RCRA P-Series: None listed.
RCRA U-Series: None listed. Dispose of as unused product.

14. Transport Information

LAND TRANSPORT (US DOT):

DOT Proper Shipping Name: Printing ink.
DOT Hazard Class: 3 FLAMMABLE LIQUID
UN/NA Number: UN1210 **Packing Group:** II

LAND TRANSPORT (Canadian TDG):

TDG Shipping Name: Printing ink.
UN Number: UN1210 **Packing Group:** II
Hazard Class: 3 - FLAMMABLE LIQUID **TDG Classification:**

LAND TRANSPORT (European ADR/RID):

ADR/RID Shipping Name: Printing ink.
UN Number: UN1210 **Packing Group:** II
Hazard Class: 3 - FLAMMABLE LIQUID

MARINE TRANSPORT (IMDG/IMO):

IMDG/IMO Shipping Name: Printing ink.
UN Number: UN1210 **Packing Group:** II
Hazard Class: 3 - FLAMMABLE LIQUID

AIR TRANSPORT (ICAO/IATA):

ICAO/IATA Shipping Name: Printing ink.
UN Number: UN1210 **Packing Group:** II
Hazard Class: 3 - FLAMMABLE LIQUID

15. Regulatory Information

EPA SARA (Superfund Amendments and Reauthorization Act of 1986) Lists

CAS #	Hazardous Components (Chemical Name)	S. 302 (EHS)	S. 304 RQ	S. 313 (TRI)
78-93-3	Methyl ethyl ketone	No	Yes NA	No
3109-63-5	Tetrabutylammonium hexafluorophosphate	No	No	No
25359-84-6	Phenol-. alpha.-pinene resin	No	No	No

This material meets the EPA 'Hazard Categories' defined for SARA Title III Sections 311/312 as indicated:

[ ] Yes [X] No Explosive
[X] Yes [ ] No Flammable (gases, aerosols, liquid, or solid)
[ ] Yes [X] No Oxidizer (liquid, solid or gas)
[ ] Yes [X] No Self-reactive
[ ] Yes [X] No Pyrophoric (liquid or solid)
[ ] Yes [X] No Pyrophoric gas
[ ] Yes [X] No Self-heating
[ ] Yes [X] No Organic peroxide
[ ] Yes [X] No Corrosive to metal
[ ] Yes [X] No Gas under pressure (compressed gas)
[ ] Yes [X] No In contact with water emits flammable gas
[ ] Yes [X] No Combustible Dust
[ ] Yes [X] No (Physical) Hazard Not Otherwise Classified (HNOC)
[X] Yes [ ] No Acute toxicity (any route of exposure)
[X] Yes [ ] No Skin Corrosion or Irritation
[X] Yes [ ] No Serious eye damage or eye irritation
[ ] Yes [X] No Respiratory or Skin Sensitization
[ ] Yes [X] No Germ cell mutagenicity
[ ] Yes [X] No Carcinogenicity
[X] Yes [ ] No Reproductive toxicity
[X] Yes [ ] No Specific target organ toxicity (single or repeated exposure)
[ ] Yes [X] No Aspiration Hazard
[ ] Yes [X] No Simple Asphyxiant
[ ] Yes [X] No (Health) Hazard Not Otherwise Classified (HNOC)

California Proposition 65

WARNING

This product can expose you to chemicals including Styrene, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov. This product can expose you to chemicals including Toluene, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to

www.P65Warnings.ca.gov.

CAS #	Hazardous Components (Chemical Name)	Other US EPA or State Lists
78-93-3	Methyl ethyl ketone	TSCA: Inventory CA TAC, Title 8: TAC: Cat. IIa, Title 8 NC TAP: Yes: NC TAP
3109-63-5	Tetrabutylammonium hexafluorophosphate	TSCA: Inventory
25359-84-6	Phenol-. alpha.-pinene resin	TSCA: Inventory

CAS #	Hazardous Components (Chemical Name)	International Regulatory Lists
78-93-3	Methyl ethyl ketone	Mexico INSQ: 1193 Japan ENCS: 2-542 Germany WHCS: 150: WGK 1 Switzerland Giftliste 1: G-2429 REACH: (P), 01-2119457290-43: Full
3109-63-5	Tetrabutylammonium hexafluorophosphate	Japan ENCS: 2-186 REACH: (P)
25359-84-6	Phenol-. alpha.-pinene resin	Japan ENCS: 7-667 REACH: (P)

16. Other Information

Revision Date: 05/15/2024

Additional Information About This Product: To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information presented in this document. Final determination of suitability of any material is the sole responsibility of the user to follow local, state and federal laws and regulations in regards to handling of hazardous materials. Although certain hazards are described herein, unknown hazards may exist and caution should always be exercised.

Company Policy or Disclaimer: